

CLAIMS

What is claimed is:

1. An improved gas burner head assembly, comprising:
 - a. a burner cap, said burner cap being disc shaped, said burner cap having a top, said top of said burner cap having included thereon a centrally located horizontal surface and a tapering surface, said tapering surface extending from said horizontal surface and terminating at an edge of said top of said burner cap;
 - b. said edge of said top of said burner cap having defined thereon a downturned flange or lip, said lip overhanging said edge of said burner cap, said burner cap further having a bottom surface, said bottom surface being recessed away from said lip creating a recessed portion of said bottom surface thereon, a raised boss, said raised boss being centrally located on said bottom surface of said burner cap, said raised boss having a first hole and a second hole defined therein;
 - c. a burner head, said burner head being complimentary in shape to said burner cap, said burner head being defined as a flat plate, said flat plate having a top surface and a bottom surface defined thereon, a first annular boss is defined on an outer portion of said burner head and projecting upwards creating a central cavity thereby, said first annular boss having a thickness and a height;

- d. said first annular boss has a series of main flame slots and secondary flame slots defined therein, a second annular boss is centrally located on said bottom surface of said burner head and projects downward to be positioned over a gas jet, said gas jet being located in a burner base;
- e. said second annular boss has a centrally located hole defined therein, said centrally located hole penetrating through said top surface of said burner head;
- f. said burner head having a plurality of pads, said plurality of pads radiating away from said second annular boss, said plurality of pads each having a foot defined thereon, said foot creating a stable support to rest upon said burner base, a positioning blade is positioned on each of said feet, and projects in a downward orientation;
- g. each of said positioning blades has a length, said length preventing said burner head from being dislodged from said burner base;
- h. said top surface of said burner head has a first hole and a second hole defined therein, said first and said second hole each being coincidently positioned with said first and said second holes in said burner cap, a first and second pin means is inserted into said first and second hole located in said burner head respectfully, and is positionally engaged with said first and second hole in said burner cap, creating a burner head assembly, said bottom surface of said

burner cap and said central cavity of said burner head defining a distribution chamber therebetween, said distribution chamber communicating with the external environment via said main flame slots and said secondary flame slots;

- i. a burner base, said burner base being shaped to define a mixing chamber therein, said mixing chamber having a bottom, said bottom of said mixing chamber having a weep hole defined therein, said weep hole permitting water and dirt to exit therefrom, said burner base further having a gas inlet defined thereon, said gas inlet allowing flammable gas to be inserted into said mixing chamber through a gas jet, said gas jet being located below said second annular boss in said burner head assembly; and
- j. said burner base having a first blade and a second blade orthogonally arranged in a parallel relationship creating an orientation slot therebetween, said first and second blade being attached to a wall of said mixing chamber, said orientation slot positionally arranges said burner head assembly on said burner base, a first corner and a second corner being defined on said burner base and each locating one of said positioning blades thereby, said burner base having a locating means for an igniter, said burner head additionally having an igniter positioning means therein positionally aligned with said locating means for an igniter.

- 2. The improved burner head assembly of claim 1 wherein;

- a. said first hole and said second hole in said burner head being threadably defined as a first and second threaded hole; and
 - b. said first and second fastening means being defined as a first and second threaded fastener, said first and second threaded fastener being threadably engaged in said first and second threaded holes in said burner head.
3. The improved burner head assembly of claim 1 wherein;
- a. said locating means on said burner base has a pad defined thereon, said pad protruding outwards from an outer surface of said burner base, said base having a hole defined therein, said hole insertably receiving an igniter therein;
 - b. said first annular boss of said burner head has an igniter hole defined therein, said igniter hole being coincidentally located with said hole in said burner base, a wall extends from said burner head to the height of said first annular boss creating a semicircular slot thereon, said wall further having a slot defined therein, said slot allowing a spark to ignite said flammable gas in said distribution chamber.
4. The improved burner head assembly of claim 1 wherein said plurality of said blades is three.
5. The improved burner head assembly of claim 1 wherein said pin means being

defined as threaded pins, said threaded pins being threadably engaged in said first and second holes in said burner head, said first and second holes in said burner cap being co-incidentally aligned with said first and second threaded pins threadably engaged in said burner head, allowing engagement against said bottom surface of said burner cap, creating a distribution changer therebetween.